

California Infrastructure State Revolving Fund

Interest Rate Setting Guidelines

The ISRF Interest Rate Setting Guidelines provide for the rate setting methodology for the ISRF program that is designed to achieve a number of goals:

- 1) Mitigate the risks of lending to lower creditworthy Borrowers by including risk-based factors in the interest rate setting methodology,
- 2) Increase the attractiveness of the Infrastructure State Revolving Fund Program to higher-rated credits, thereby improving the over-all loan portfolio risk profile,
- 3) Allow subsidies to be provided to all Borrowers, yet simultaneously allow the I-Bank to achieve its mission with respect to promoting employment opportunities and assisting “low-wealth” areas of the State by making additional subsidies available to Borrowers in communities with high unemployment and/or low median household incomes,
- 4) Ensure long term ISRF viability by setting interest rates in a manner that covers the I-Bank’s cost of funding loans, easily adjusts to changing market and economic conditions and satisfies tax compliance requirements,
- 5) Achieve goals 1-4 in a manner that is based on publicly available pricing data and is transparent to the Borrowers and prospective applicants.

Introduction/Background:

The California Infrastructure and Economic Development Bank (I-Bank), through its Infrastructure State Revolving Fund Program (“ISRF” or the “Program”) has historically offered a one size fits all interest rate pegged at 67% of a generic A rated municipal bond with an equivalent term [weighted average life] to the Loan. This approach, while simple to apply, attractive to lower rated Borrowers, and reasonably well correlated to pre-2008 Treasury/Muni interest rate differentials has, over time, resulted in an excessive and arbitrary assignment of subsidies and has potentially endangered the long term viability of the Program by requiring greater dedication of Program revenues to cover Bond debt service, leaving less available to meet annual operating costs of the I-Bank and the ISRF Program. Moreover, the volatility of post-2008 credit spreads as well as Treasury/Muni spreads indicates that a static approach is not sustainable if both marketability and solvency are to be maintained.

Unlike many of the country’s other State Revolving Fund Programs (SRF Program), which are limited to offering loans to water & sewer agencies, the I-Bank offers loans to a broad range of municipal Borrowers and certain nonprofit organizations secured by a

variety of pledges. Broadly, the quality of these pledges can be described as Strong, Good, and Adequate. Consequently, the I-Bank is faced with a much wider range of credit spreads than the typical SRF Program.

Proposed Methodology:

I-Bank's proposed methodology is a three step process.

Step 1 Determine the quality of the Security Pledge to select the appropriate proxy MMD scale to use.

- 1) MMD GO scales will be the entry point for Strong Pledge Loans,
- 2) MMD Revenue Bond Scales will be the entry point for Good Pledge Loans, and
- 3) MMD COP scales be used as the entry point for Adequate Pledge Loans.

Step 2 Use Published Letter Category Ratings for the pledged revenue stream to determine the Base (Market Price) Spread from the MMD AAA GO Scale applicable to the Borrower. Unrated and/or Below Investment Grade Borrowers would be assigned a spread equal to 105% of the Baa/BBB Spread (by maturity) within each category determined in Step 1.

Step 3 Apply subsidies to the spread determined in Steps 1 & 2 subject to certain limits:

- 1) General Subsidy applicable to All Borrowers equal to 15% of the applicable spread
- 2) Median Household Income Subsidy available on a sliding percentage scale to Borrowers that meet certain thresholds compared to the State Average Median Household Income (weighted)
- 3) Unemployment Rate Subsidy available on a sliding percentage scale to Borrowers that meet certain thresholds compared to the State Average Unemployment Rate (weighted)
- 4) Additional Subsidies as determined desirable by the Board & I-Bank Management (weighted)
- 5) Total Subsidies applicable to any Loan would be limited to the equivalent of a 2 letter category credit upgrade and 1 Security Pledge upgrade. In no event would a Borrower qualify for rates less than the MMD AAA GO (spread ≥ 0 except as outlined below in 6).
- 6) Upper limits on Loan Rates would be governed by Tax Law limitations on the portfolio yield.
- 7) If additional assistance is needed during construction, a stepped down coupon approach may be considered (x years at a discounted stepped down coupon

rate, reverting to normal coupons at $x+1$); provided Borrowers agree to longer restrictions on pre-payments.

By applying this methodology under these Guidelines, individual Loans would be structured using the adjusted scale derived from above. This will offer an incentive to better rated credits to utilize the ISRF Program, since they can reap the same benefits of a sloping yield curve as they would through a public offering at better rates.

Appendix A (attached) provides additional details on the Subsidy calculations, as well as several examples of how the methodology would be applied to different Borrowers.

APPENDIX A

Base Proxy Interest Rate and Spread Tables

Hypothetical as of November 14, 2013

MMD Base Rates (AAA GO) & Spreads		ALL RATES as of: 11/14/2013													
GO (Stongest Pledge)						Revenue (Strong Pledge)					Lease/COP (Weak Revenue Pledge)				
Year	Spread to MMD AAA GO					Spread to MMD AAA GO					Spread to MMD AAA GO				
	AAA	AA	A	BBB	NR/<IG	AAA	AA	A	BBB	NR/<IG	AAA	AA	A	BBB	NR/<IG
1	0.17	0.02	0.16	0.68	0.71	0.03	0.05	0.19	0.71	0.75	0.25	0.27	0.41	0.93	0.98
2	0.33	0.03	0.22	0.93	0.98	0.04	0.07	0.26	0.97	1.02	0.38	0.41	0.6	1.31	1.38
3	0.5	0.07	0.24	1.09	1.14	0.05	0.12	0.29	1.14	1.20	0.4	0.47	0.64	1.49	1.56
4	0.78	0.09	0.31	1.13	1.19	0.07	0.16	0.38	1.2	1.26	0.48	0.57	0.79	1.61	1.69
5	1.16	0.11	0.45	1.18	1.24	0.08	0.19	0.53	1.26	1.32	0.5	0.61	0.95	1.68	1.76
6	1.52	0.14	0.58	1.31	1.38	0.09	0.23	0.67	1.4	1.47	0.5	0.64	1.08	1.81	1.90
7	1.9	0.19	0.66	1.37	1.44	0.1	0.29	0.76	1.47	1.54	0.5	0.69	1.16	1.87	1.96
8	2.22	0.21	0.74	1.48	1.55	0.1	0.31	0.84	1.58	1.66	0.5	0.71	1.24	1.98	2.08
9	2.42	0.23	0.78	1.52	1.60	0.1	0.33	0.88	1.62	1.70	0.5	0.73	1.28	2.02	2.12
10	2.61	0.24	0.8	1.53	1.61	0.1	0.34	0.9	1.63	1.71	0.5	0.74	1.3	2.03	2.13
11	2.77	0.25	0.81	1.55	1.63	0.1	0.35	0.91	1.65	1.73	0.5	0.75	1.31	2.05	2.15
12	2.91	0.25	0.81	1.57	1.65	0.1	0.35	0.91	1.67	1.75	0.5	0.75	1.31	2.07	2.17
13	3.06	0.25	0.81	1.57	1.65	0.1	0.35	0.91	1.67	1.75	0.5	0.75	1.31	2.07	2.17
14	3.21	0.25	0.81	1.57	1.65	0.1	0.35	0.91	1.67	1.75	0.5	0.75	1.31	2.07	2.17
15	3.34	0.25	0.81	1.57	1.65	0.1	0.35	0.91	1.67	1.75	0.5	0.75	1.31	2.07	2.17
16	3.46	0.25	0.81	1.56	1.64	0.1	0.35	0.91	1.66	1.74	0.5	0.75	1.31	2.06	2.16
17	3.57	0.25	0.81	1.53	1.61	0.09	0.34	0.9	1.62	1.70	0.49	0.74	1.3	2.02	2.12
18	3.66	0.25	0.81	1.5	1.58	0.09	0.34	0.9	1.59	1.67	0.49	0.74	1.3	1.99	2.09
19	3.75	0.24	0.81	1.46	1.53	0.08	0.32	0.89	1.54	1.62	0.48	0.72	1.29	1.94	2.04
20	3.81	0.24	0.81	1.43	1.50	0.08	0.32	0.89	1.51	1.59	0.48	0.72	1.29	1.91	2.01
21	3.87	0.24	0.8	1.4	1.47	0.06	0.3	0.86	1.46	1.53	0.48	0.72	1.28	1.88	1.97
22	3.92	0.24	0.8	1.37	1.44	0.06	0.3	0.86	1.43	1.50	0.48	0.72	1.28	1.85	1.94
23	3.97	0.24	0.78	1.36	1.43	0.06	0.3	0.84	1.42	1.49	0.48	0.72	1.26	1.84	1.93
24	4.01	0.24	0.77	1.32	1.39	0.06	0.3	0.83	1.38	1.45	0.48	0.72	1.25	1.8	1.89
25	4.04	0.23	0.76	1.32	1.39	0.06	0.29	0.82	1.38	1.45	0.48	0.71	1.24	1.8	1.89
26	4.07	0.23	0.75	1.3	1.37	0.05	0.28	0.8	1.35	1.42	0.48	0.71	1.23	1.78	1.87
27	4.09	0.23	0.74	1.29	1.35	0.05	0.28	0.79	1.34	1.41	0.48	0.71	1.22	1.77	1.86
28	4.11	0.22	0.73	1.28	1.34	0.05	0.27	0.78	1.33	1.40	0.48	0.7	1.21	1.76	1.85
29	4.12	0.22	0.73	1.28	1.34	0.05	0.27	0.78	1.33	1.40	0.48	0.7	1.21	1.76	1.85
30	4.13	0.22	0.73	1.28	1.34	0.05	0.27	0.78	1.33	1.40	0.48	0.7	1.21	1.76	1.85

Using these rates/spreads three hypothetical Borrowers would be assigned Base Spreads as follows:

Scenario 1.

An A rated Borrower seeking a loan secured by Water/Sewer Municipal Utility Revenues would complete Steps 1 & 2 and be assigned a starting scale based on spreads indicated in the A column of the Revenue (Strong Pledge) section (19 bps – 91 bps). After application of the General Subsidy (15% of the Base Spread) the revised Spreads would equal (16 bps – 77 bps).

Scenario 2.

A BBB rated Borrower seeking a loan secured by an annual appropriation lease on a city owned police/fire station would complete Steps 1 & 2 and be assigned a starting scale

based on spreads indicated in the BBB column of the Lease/COP (Good Pledge) section (93 bps – 207 bps). After application of the General Subsidy (15% of the Base Spread) the revised Spreads would equal (79 bps – 176 bps).

Scenario 3.

An unrated/Below Investment Grade Borrower seeking a loan secured by an annual appropriation lease on a city owned office building would complete Steps 1 & 2 and be assigned a starting scale based on spreads indicated in the NR/<IG column of the Lease/COP (Adequate Pledge) section (98 bps – 217 bps). After application of the General Subsidy (15% of the Base Spread) the revised Spreads would equal (83 bps – 184 bps).

All three Borrowers qualify for the General Subsidy of 15%, so preliminary spread adjustments would be as indicated above. In addition to providing assistance to lower rated or unrated Borrowers, this General Subsidy will help to attract stronger rated credits within each letter category by equalizing base rates (A+ vs A- Borrowers)

General Subsidy:

General Subsidy	Subsidy (% of “Spread”)
All Borrowers	15%

MHI Adjustments: (weighted)*

Median Household Income vs. State Average	Subsidy (% of “Spread”)
>= State Average MHI	0%
< 75% of State Average MHI	30%
< 50% of State Average MHI	40%
< 25% of State Average MHI	50%

Unemployment Rate Adjustments: (weighted)*

Unemployment Rate vs. State Average	Subsidy (% of “Spread”)
<= State Average Unemployment Rate	0%
> 115% of State Average Unemployment Rate	30%
> 125% of State Average Unemployment Rate	40%
> 135% of State Average Unemployment Rate	50%

**Economic Disaster/Other Circumstance Approved by Board Action
Adjustments: (weighted or add-on)****

Qualifies under Criteria	Subsidy (% of “Spread”)
Yes	25%
No	0%

* Weights would sum up to 100% with emphasis based on Board/I-Bank goals and the total number of Subsidy Categories. In the examples provided, a 50/50 weighting is assumed for MHI and Unemployment.

** This category could either be weighted (as described above), or it could be an additional subsidy that would have the effect of allowing the all-in rate adjustment to exceed the “Spread to MMD”.

Examples:

The following Charts show the Range of Possible Interest Rates Achievable by the three hypothetical Borrowers described earlier. Minimum Subsidies indicates the Scale that could be achieved solely by applying the General (15%) Subsidy, whereas Maximum Subsidies indicates that the Borrower qualified for and received the maximum subsidies (subject to limitation) available for Low MHI and High Unemployment, as well as the Subsidy for being in an Economic Disaster Area (as an add-on).